



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/760,997	01/20/2004	Emad S. Isaac	IS01108TC/FLE MOTA:0005	1644
7590	01/27/2006		EXAMINER WEISKOPF, MARIE	
Michael G. Fletcher Fletcher Yoder P.O. Box 692289 Houston, TX 77269-2289			ART UNIT 3661	PAPER NUMBER

DATE MAILED: 01/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/760,997	ISAAC, EMAD S.	
	Examiner	Art Unit	
	Marie A. Weiskopf	3661	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☒ Claim(s) 31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 January 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1/20/2004</u> . | 6) <input type="checkbox"/> Other: _____ |

89

DETAILED ACTION

Claim Objections

1. Claim 31 is objected to because of the following informalities:
 - Claim 31, line 11 – “present a preferred route if with the origination data...” does not make sense, examiner suggests removing “with”
 - Claim 31, line 15 – “present the optimal route if with the origination data...” does not make sense, examiner suggests removing “with”

Appropriate correction is required.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 3, 12, 17-19, 22, 24 and 31 are rejected under 35 U.S.C. 102(e) as being anticipated by Chowanic et al (US 6,505,118.) Chowanic et al discloses a navigation system for land vehicles that learns and incorporates preferred navigation routes, comprising:

- In regard to claim 1, a vehicle navigation system comprising:
 - A vehicle (Column 1, line 59)

- A navigation system housed in the vehicle, the system having:
 - A processor (Column 2, line 54)
 - A positioning system coupled to the processor for determining position data relating to a location of the vehicle (Column 2, line 53)
 - Chowanic et al does not say explicitly that there is a memory coupled to the processor although it is inherent due to the fact that information is stored in an address book or if it is a previously entered destination (Column 2, lines 54-56)
 - A program for use by the processor configured to:
 - Determine if position data and destination data correspond to an operator preferred route stored in memory (Column 2, lines 60-63)
 - Provide the operator preferred route if the position data and destination data correspond to the operator preferred route (Column 2, lines 60-63)
 - Update the operator preferred route by monitoring the position data. (Column 3, lines 58-61)
- In regard to claim 3, the navigation system comprises a user interface configured to facilitate entry of the destination data by a vehicle operator. (Column 2, lines 50-53)
- In regard to claim 12, A system comprising:
 - A processor (Column 2, line 54)

- A positioning module in communication with the processor for determining location data that relates to a location of a device (Column 2, line 53)
- An interface module adapted to communicate data to a user of the device (Column 2, lines 50-53)
- A routine utilized by the processor, the route configured to:
 - Utilize location data from the positioning module (Column 2, lines 54-64)
 - Utilize destination data provided to the interface module (Column 2, lines 54-64)
 - Determine whether the location data and the destination data correspond to a defined route stored in the memory (Column 2, lines 54-64)
 - Provide the defined route if the location data and destination data correspond to the defined route (Column 2, lines 59-63)
 - Generate an optimal route if the location data and the destination data do not correspond to the defined route (Column 2, line 67 – Column 3, line 3)
 - Provide the optimal route if the location data and the destination data do not correspond to the defined route (Column 2, line 67 – Column 3, line 3)
- In regard to claim 17, the positioning module is a global positioning system (Column 2, line 53)

- In regard to claim 18, a method of operating a navigation system, the method comprising:
 - Entering a destination location at a device (Column 2, lines 50-53)
 - Receiving an origination location (Column 2, line 53)
 - Determining if the origination location has been utilized with the destination location based on stored data (Column 2, lines 54-64)
 - Providing a default route if the default route has been defined in memory (Column 2, lines 54-65)
 - Generating an optimal route if the default route is not defined for the origination location and the destination location (Column 2, line 67 – Column 3, line 3)
 - Providing an optimal route if a default route is not defined (Column 2, line 67 – Column 3, line 3)
- In regard to claim 19, setting a default route if a condition is set. In the case of Chowanic et al, the condition is set if the vehicle deviates from the given route. (Column 3, lines 4-60)
- In regard to claim 22, monitoring an actual route from the origination location to a destination location. (Column 3, lines 62-65)
- In regard to claim 24, determining further comprises accessing stored data in memory within the device. Chowanic et al stores the route information and therefore would have to access the stored data in memory within the device since it does not communicate with an external database.

- In regard to claim 31, a method of manufacturing a navigation system comprising the acts of:
 - Providing a navigation system comprising a processor
 - Coupling a user interface to the processor for entering data from an operator (Column 2, lines 50-53)
 - Coupling a positioning module to the processor for determining location data (Column 2, lines 50-53)
 - Coupling a display to the processor for presenting route data to an operator
 - Coupling a memory to the processor
 - Configuring a program with the memory that is adapted to:
 - Receive destination data from the user interface (Column 2, lines 50-53)
 - Receive origination data from one of the positioning module and the user interface (Column 2, lines 50-53)
 - Present a preferred route if the origination data and the destination data correspond to the preferred route (Column 2, line 54-64)
 - Generate an optimal route if the origination data and the destination data do not correspond to the preferred route (Column 2, line 67 – Column 3, line 3)

- Present the optimal route if the origination data and the destination data do not correspond to the preferred route. (Column 2, line 67 – Column 3, line 3)

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 2, 4-6, 13-14, 16, 20-21, and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chowanic et al (US 6,505,118) in view of Ohler (US 6,961,658.) Ohler discloses a method, system and article of manufacture for identifying regularly traveled routes.

- In regard to claims 2 and 4, Chowanic et al fails to disclose the navigation system comprising a display for providing images to an operator of a vehicle and the user interface comprising a keyboard and display, but does mention providing the route information to the operator of a vehicle. Ohler discloses a user interface comprising an input panel, such as a keyboard, and also a display. (Column 2, lines 49-54) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the display and keyboard as a way for providing images to an operator and of inputting destination information so the user can easily input and read necessary information for navigation.

- In regard to claim 5, Chowanic et al fails to disclose wherein the operator preferred route is defined by the number of times that a specific route is utilized. Chowanic et al discusses that if an operator deviates from a planned route, that deviation is then considered a new preferred route. Ohler, on the other hand, discusses the automatic learning mode for the navigation system keeping track of how often routes are traveled and then storing them as regularly traveled routes. (Column 4, lines 36-41) It would have been obvious to one having ordinary skill in the art at the time of the invention to use the automatic learning mode of Ohler with Chowanic et al in order to provide a system that keeps track of routes that are repeated on a regular basis and are what the user prefers.
- In regard to claim 6, Chowanic et al fails to disclose the operator preferred route being defined by the operator based on preferences of the operator. Ohler discusses allowing the operator of the vehicle the control of turning on the learning mode for the navigation system in order for the navigation system to learn the route. (Column 4, lines 10-35) It would have been obvious to one having ordinary skill in the art at the time of the invention to allow the operator to enter preferred routes so the system can easily recognize those routes without having to go through the learning stage.
- In regard to claims 13 and 14, Chowanic et al fails to disclose the system comprising a communication module that is coupled to the processor and configured to exchange navigation and location data with a system external to the device via a wireless link. Ohler discloses having an real-time traffic

information (RTTI) receiver and antenna in order to retrieve real-time traffic information from available sources. (Column 2, lines 26-33) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the real-time traffic information receiver and antenna which communicates with a system external to the device in order to provide updated traffic information to the navigation system in order to provide the fastest and easiest route possible to the user.

- In regard to claim 16, Chowanic et al fails to disclose the interface module comprising a keyboard and display. Ohler discloses a user interface comprising an input panel, such as a keyboard, and also a display. (Column 2, lines 49-54) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the display and keyboard as a way for providing images to an operator and of inputting destination information so the user can easily input and read necessary information for navigation.
- In regard to claim 20, Chowanic et al fails to disclose setting the condition if the number of times the origination location has been utilized with the destination location is greater than or equal to a specific number of times. Ohler discloses a record of a new trip being sustained for a certain period of time and if any additional trip is not taken, then the record may be discarded, but if more additional trips are made on that route, then it is kept. (Column 5, lines 33-54) It would have been obvious to one having ordinary skill in the art at the time of the

invention to set a condition of keeping preferred routes in order to remove routes that are not used regularly and therefore would not be preferred by the user.

- In regard to claim 21, Chowanic et al fails to disclose setting the condition if a user enters that an actual route is a default route. Ohler discusses allowing the user to select a default route. (Column 4, lines 10-35) It would have been obvious to one having ordinary skill in the art at the time of the invention to allow a user to select their own default route so the system doesn't need to learn a route that the user already knows they will take a lot.
- In regard to claims 32 and 33, Chowanic et al fails to disclose coupling a communications module to the processor and communicating with an external server to download traffic data. Ohler discusses having an RTTI receiver and antenna which would constitute as a communications module which is connected to the processor. (Column 2, lines 26-34) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the communication module in order to receive updated data on congestion of the roads.

5. Claims 15 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohler (US 6,961,658) as applied to claims 12 and 31 above, and further in view of Stefan et al (US 6,212,473.) Stefan et al discloses a vehicle navigation system having inferred user preferences.

- In regard to claim 15, Chowanic et al and Ohler fail to disclose the interface module utilizing hands-free voice capability. Steafn et al discusses user inputs

being used by known methods, which includes voice input. (Column 3, lines 1-4)

It would have been obvious to one having ordinary skill in the art at the time of the invention to include using voice input for inputting information since it is well known and would allow the user to not have to type in destination information.

- In regard to claim 34, Chowanic et al and Ohler fail to disclose communicating with an external server to download construction data via the communication module. Stefan et al discusses having a wide-area traffic monitoring system which also monitors the amount of road construction the roads. (Column 3, lines 13-18) It would have been obvious to one having ordinary skill in the art at the time of the invention to make sure that the traffic monitoring system used would include road construction areas because these are areas that can cause congestion and slowing.

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Chowanic et al (US 6,505,118) in view of Pu et al (US 6,292,743.) Pu et al discloses a mobile navigation system. Chowanic et al fails to disclose where the determining of whether an origination location and a destination location have been utilized together previously comprises accessing stored data in a database external to the device. Pu et al discloses a navigation server for storing client profiles and using this server, it would have been obvious to one having ordinary skill in the art at the time of the invention to store the determining information on the server so less memory would be needed on the navigation system.

7. Claims 7-11 and 25-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pu et al (US 6,292,743) in view of Ohler (6,961,658.) Pu et al discloses a mobile navigation system and Ohler discloses a method, system and article of manufacture for identifying regularly traveled routes.

- In regard to claim 7, Pu et al discloses a vehicle having a navigation system and a navigation server adapted to communicate with the navigation system via a network. (Column 4, line 64 – Column 5, line 11) Pu et al also discloses generating an optimal route from an origination location to a destination location. (Column 5, lines 26-32) Pu et al also discloses accessing a client profile stored in a memory (Column 5, lines 26-32) but does not disclose determining whether a preferred route is defined and providing at least one of the optimal route and the preferred route to the operator of the vehicle. Ohler discloses a navigation system which determines whether there is a preferred route. (Column 4, lines 42-53) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the preferred route of Ohler with the navigation server and system presented by Pu et al in order to provide a system which alleviates the need to have specific pre-defined turn-by-turn mapping databases installed on the navigation system. The data would be kept on the navigation server, but preferred routes would be easily accessible through the client profile.
- In regard to claim 8, Pu et al discloses the network comprising a satellite link between the navigation system and the navigation server. (Column 5, lines 35-38)

Art Unit: 3661

- In regard to claim 9, Pu et al discloses the network comprising a cellular node between the navigation system and the navigation server. (Column 5, lines 12-13)
- In regard to claim 10, both Pu et al and Ohler disclose the program interacting with a traffic server to integrate traffic data with the origination location and the destination location to generate an optimal route. (Ohler: Column 2, lines 26-32) (Pu et al: Column 8, lines 1-7)
- In regard to claim 11, Pu et al discloses the program interacting with an information server to integrate mapping data with the origination location and the destination location to generate the optimal route. (Column 8, lines 45-59)
- In regard to claim 25, Pu et al discloses:
 - Entering destination data into a user interface of a vehicle (Column 6, lines 15-16)
 - Receiving origination data (Column 4, line 67 – Column 5, line 1)
 - Communicating the origination data and the destination data to a server via a network (Column 5, lines 6-25)
 - Accessing a client profile (Column 5, lines 31-32)

Pu et al fails to disclose:

- Comparing the client profile with the origination data and the destination data

- Determining if the origination data and the destination data correspond to a defined route in the client profile that is based on user's experience and knowledge
- Generating an optimal route if the origination data and the destination data do not correspond to the defined route
- Communicating at least one of the optimal route and the user defined route to the vehicle.

As discussed previously, Ohler determines whether the origination data and the destination data correspond to a defined route and generate an optimal route if the origination data and the destination data do not correspond to the defined route. (Column 4, lines 10-53) It would have been obvious to one having ordinary skill in the art at the time of the invention to include the preferred route calculating of Ohler with the navigation server of Pu et al in order to alleviate the need to have specific pre-defined turn-by-turn mapping databases installed on the client. (Pu et al: Column 2, lines 45-51)

- In regard to claim 26, Ohler discloses presenting at least one of the optimal route and the user defined route to an operator of a vehicle (Column 2, lines 50-54)
- In regard to claim 27, Ohler discloses setting the user defined route if a number of times a route is associated with the origination data and the destination data is great than or equal to a specific value. (Column 5, lines 33-54)
- In regard to claim 28, Pu et al discloses communicating comprising utilizing a satellite link between the server and the vehicle. (Column 5, lines 35-38)

Art Unit: 3661

- In regard to claim 29, Ohler discloses monitoring an actual route from an origination location that corresponds to the origination data to a destination location that corresponds to the destination data. (Column 4, lines 42-53)
- In regard to claim 30, Pu et al discloses generating an optimal route is automatically calculated based on a predefined routine. (See Figure 4)

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- US 6,941,223 to Schuessler discloses a method and system for dynamic destination routing
- US 2005/0085997 to Park discloses a method for searching car navigation path by using log file
- US 6,629,034 to Kozak et al discloses a driving profile method and system
- US 5,877,708 to Hijikata discloses a on-vehicle navigation system having route searching function

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marie A. Weiskopf whose telephone number is (571) 272-6288. The examiner can normally be reached on Monday-Thursday between 7:00 AM and 5:30 PM.

Art Unit: 3661

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Black can be reached on (571) 272-6956. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


THOMAS G. BLACK
SUPERVISORY PATENT EXAMINER
GROUP 2600